

WHAT IS CLAIMED IS:

1. An electron-emitting device comprising: a pair
of conductors provided on a substrate so as to be
opposed to each other; and a pair of deposition films
5 containing carbon as a main component which
respectively connected to the pair of conductors and
disposed with a gap therebetween, wherein sulfur is
contained in the deposition film in a range of not less
than 1 mol% and not more than 5 mol% as a ratio to
10 carbon.

2. An electron-emitting device comprising: a pair
of device electrodes provided on a substrate so as to
be opposed to each other; an electroconductive film
15 which is connected to the pair of device electrodes and
has a fissure between the pair of device electrodes;
and a deposition containing carbon as a main component
which is formed in the fissure and on an area including
the fissure and has a gap whose width is narrower than
20 the fissure in the fissure, wherein sulfur is contained
in the deposition in a range of not less than 1 mol%
and not more than 5 mol% as a ratio to carbon.

3. An electron source comprising: a plurality of
25 electron-emitting devices defined in claim 1 or 2 which
are provided on a substrate; and a wiring connected to
a plurality of the electron-emitting devices.

4. An image-forming apparatus comprising: an electron source defined in claim 3; and an image-forming member for forming an image by collision of an electron emitting from the electron source.

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